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December 15, 1998

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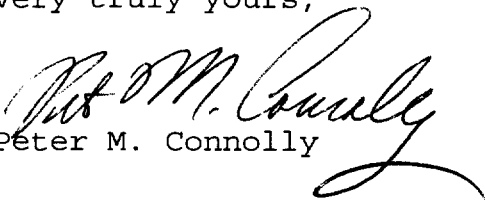
Re: CC Docket No. 97-213

Dear Ms. Salas:

Herewith transmitted, on behalf of United States Cellular Corporation ("USCC"), are an original and four copies of its "Motion To Accept Late-Filed Comments" and "Comments" in the above-referenced proceeding.

In the event there are any questions concerning this matter, please communicate with this office.

Very truly yours,


Peter M. Connolly

Enclosure

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OFFICE OF THE SECRETARY

In the Matter of)
)
Communications Assistance) CC Docket No. 97-213
For Law Enforcement Act)

United States Cellular Corporation ("USCC") hereby requests that the Commission accept its Comments in the above-captioned proceeding one day late. Undersigned counsel was unable to obtain necessary client review for the attached Comments owing to the unexpected illness of the USCC employee with knowledge of the facts asserted in the Comments. Accordingly, we request that the Commission accept the attached Comments one day late. It is submitted that the Commission will benefit from the cost data and other material included in the Comments and that no party will be prejudiced by their acceptance.

USCC understands the importance of timely submission of comments in FCC rulemaking proceedings and complies with such deadlines in all instances where it is able to do so. However, a late submission of these Comments was unavoidable for the reason given above.

Conclusion

For the foregoing reasons, we request that the attached Comments be accepted, although they are filed one day late.

Respectfully submitted,

UNITED STATES CELLULAR CORPORATION

By: 

Peter M. Connolly

Koteen & Naftalin, L.L.P.
1150 Connecticut Ave., N.W.
Washington, D.c. 20036

December 15, 1998

Its Attorneys

In the Matter of)
)
Communications Assistance) CC Docket No. 97-213
For Law Enforcement Act)

United States Cellular Corporation ("USCC") hereby files its Comments in response to the Further Notice of Proposed Rulemaking¹ in the above-captioned docket. USCC owns and/or operates cellular systems in 45 and 100 RSA markets. Accordingly, it has a very considerable interest in any action the FCC may take to require CMRS carriers to add additional capabilities in response to the statutory mandate of the Communications Assistance For Law Enforcement Act ("CALEA").²

USCC approaches the issues involved in CALEA compliance from the perspective of a good corporate citizen, which has always cooperated with appropriately authorized requests for surveillance

¹ In the Matter of Communications Assistance For Law Enforcement Act, C.C. Docket No. 97-213, FCC 98-282, Further Notice of Proposed Rulemaking, released November 5, 1998 ("FNPRM").

² Communications Assistance For Law Enforcement Act Pub. L. No. 103-414, 108 stat. 4279 (1999) (codified as amended in Section of 18 U.S.C. and 47 U.S.C.)

assistance from law enforcement authorities and will continue to do so. However, USCC shares the concerns over the broad scope of CALEA implementation proposed by the FBI which have been expressed by CMRS trade associations and manufacturing industry representatives, and considers the privacy issues raised by civil liberties groups to be important ones. Protecting the privacy of customers is a vital issue for all CMRS carriers.

However, in those comments, USCC will not deal with the broad issues of CALEA's proper scope or whether the FCC was correct in determining, in the *FNPRM*, which capabilities should and should not be included in the revised industry standard known as J-STD-025. It will leave those matters to its cellular trade association, CTIA, which has participated extensively in CALEA related negotiations. USCC concurs in CTIA's comments on those issues.

USCC also believes that the relevant provisions of CALEA should be changed to permit government reimbursement for carriers' purchases of new CALEA-compliant software and other equipment after 1995 on the same basis as is available for the retrofitting of pre-1995 equipment. However, we understand that that is properly a matter for congressional consideration over which the FCC has no control.

Rather, in these comments, USCC will first demonstrate that additional time beyond what is now allotted will be necessary to

implement CALEA requirements. USCC will then, following the advice of Commissioner Furchtgott-Roth, submit "quantified cost and timing information" on CALEA compliance. USCC will submit such information as it now has in the hope that that information, together with that of other carriers, may help to shape a reasonable FCC approach to CALEA.

I. The Time It will Take USCC And Other Carriers To Implement A Revised J-STD-025 Standard Will Probably Necessitate A Further Extension of The CALEA "Capability" Deadline

June 30, 2000 is now the deadline for CALEA compliance.³ However, whether that deadline is reasonably achievable will be based on how rapidly the FCC can resolve the CALEA "capability" issues before it in this proceeding. Those issues, which are summarized below, are difficult and complex.

Under J-STD-025, carriers are required to provide law enforcement officials with the ability to isolate a criminal suspect's call content or call identifying information accurately and unobtrusively. An "access" function is required to prevent unauthorized access to, manipulation of, and disclosure of call content and call identifying information. The carrier is required to deliver call content and call identifying information to one or

³ See *Memorandum Opinion and Order*, FCC 98-223, released September 11, 1998.

more law enforcement authorities, pursuant to a court order. And the carrier is required to ensure that the call content and call identifying information are authorized to be gathered by a particular law enforcement agency and thus to prevent unauthorized access to such call content information.

There has been little debate about these basic requirements. The debate has been over two proposed requirements in J-STD-025 and the so-called "punch list," which is a list of nine additional capabilities put forward by the FBI to improve wireless call surveillance techniques. Privacy groups and telecom carriers have generally maintained that the disputed capabilities are not required by CALEA and would be unduly expensive.

In the FNPRM, the FCC has preliminarily adopted one of the two features of J-STD-025 opposed by the privacy groups and added five of the nine FBI punch list items. It has asked for more information concerning one of the original J-STD-025 items and one of the punch list items. The FCC will delegate to Telecommunications Industry Association ("TIA") the task of drafting a revised J-STD-025 to include whatever items are accepted when rules are finally adopted.

The FCC has "tentatively affirmed" that "location information," meaning cell site location at the beginning and termination of a call, which had been included in J-STD-025, should

be considered the type of "call identifying information" which must be supplied to law enforcement authorities by wireless carriers.

The FCC has, however, concluded that the record is not sufficiently developed to support a proposal originally included in J-STD-025, that "packet mode telecommunications" be supplied to law enforcement authorities. The Commission has concluded that additional analysis of this issue is needed.

With respect to the punch list items, the FCC has adopted the following ones:

(1) Content of Subject Initiated Conference Calls (FNPRM, Paras. 73-80). This capability would permit law enforcement officials to monitor the content of conversations conducted by a conference call set up by the subject under surveillance.

(2) Party Hold, Join, Or Drop On Conference Calls (FNPRM, Paras. 80-87). This feature would permit law enforcement officials to receive from telecommunications carriers messages identifying the parties to a conversation at all times.

(3) Subject Initiated Dialing and Signaling Information (FNPRM, Paras. 88-95). This capability would permit law enforcement authorities to be informed when a subject used services such as call forwarding, call waiting, call hold and three way calling. Such signaling data would not however, include voice mail.

(4) Timing Information. The FCC has concluded that each call identifying message (answer message, party join message, party drop message, etc.) would also have to be electronically "time stamped" within a specific amount of time from when the event triggering the message had occurred in the intercept.

(5). Dialed Digit Extraction (FNPRM, Paras. 123-128). This capability would require the telecommunications carrier to provide to law enforcement authorities any digits dialed by the subject after connecting to another carrier's service, such as an "800" number.

The FCC has requested more information concerning the following "punch list" item:

(1) In Band And Out of Band Signaling (FNPRM, Paras. 95-100). This technical requirement will allow a telecommunications carrier to send a notification message to law enforcement authorities when any network message (ringing, busy, call waiting signal, message light, etc.) is sent to a subject using facilities under surveillance.

The FCC has, however, tentatively concluded that the "surveillance status," "continuity check tone," and "feature status" FBI "punch list" items were not required under CALEA.

USCC is working with its switch software and hardware supplier, Nortel Networks of Richardson, Texas, to purchase the

software and hardware necessary to make its switches CALEA compliant.

However, in order to negotiate a software package, it is vital that USCC and Nortel know what standard they must meet.

Nortel now estimates that its "MTX09" software, now under development, will be able to incorporate all the "core" J-STD-025 features, including "location information." Nortel now believes that this software will be available in the first quarter of 2000 for "verification and limited deployment" and will be generally available in the third quarter of 2000, after the June 30 deadline.

If, however, the FCC adds the packet mode communications requirement to J-STD-025, this will complicate software deployment. Generally, 12-18 months are necessary from the time a standard is adopted to make it available in a software release. After that initial development period, an additional twelve months is needed for deployment.

Assuming (optimistically) that the Commission adopts rules and TIA adopts a standard in this proceeding by June 30, 1999, this development would mean the necessary software to fulfill the packet data requirement could not be deployed before approximately January 1, 2002. However, it is, we submit, very doubtful that a development of a standard can proceed that quickly.

The present uncertainty regarding the inclusion of the other

"punch list" proposals in a revised standard will further complicate and stretch out the deployment schedule.

In order to implement the "punch list" requirements, Nortel will have to develop new software to be known as "MTX10." Given the inevitable 30 month development schedule, Nortel projects the first quarter of 2001 for "verification and limited deployment" of the MTX10 software and the third quarter of that year for "general availability" of the software.

However, even that schedule is contingent on the availability of what Nortel calls a "stable well defined standard" by July, 1999. Failure to meet that date means that the MTX10 software development will be pushed forward into the future.⁴

Thus, the FCC's June 30, 2000 date for CALEA "capability" compliance will likely also have to be extended. Carriers can reasonably only be asked to do what is reasonable and attainable and prior and future delays in fixing a standard will make an extension inevitable.

⁴ Moreover, given the fact that the rules the FCC adopts next year will have to be translated into a "standard" by TIA, and TIA won't know for certain which punch list items are to be included until the FCC acts, it is likely the above deployment dates will certainly have to be pushed forward.

II. USCC's Compliance Costs Will Be Considerable

The costs of the hardware and software necessary to implement CALEA are now difficult to predict.

As an initial matter, software manufacturers have not been forthcoming regarding actual development and deployment costs of most of the software and hardware which will have to be incorporated into CMRS switches, costs which will ultimately have to be borne by CMRS carriers, and their customers.

Manufacturers have also held out the possibility that somehow all of these costs might be borne by the federal government which would require a change in CALEA itself.

However, we do know that, even given the "volume discounts" which USCC may be able to achieve, its costs for CALEA will be considerable.

For example, USCC estimates that its CALEA "license fee" costs for DMS-MTX software pursuant to J-STD-025 will be \$110 per effective voice channel (EVC). USCC will pay that cost on a per switch basis, based on the number of EVC's per switch. USCC now has 48 switches and now averages 1,030 EVCs per switch. The number of EVCs will increase in the future.

Implementation of all proposed punch list items would result in additional licensing costs of \$24 per EVC at each switch. If

the FCC adopts its tentative conclusion not to include the "surveillance status," "continuity check tone" and "feature status" punch list items, that cost would only be reduced by two dollars per EVC.

There would also be additional specific hardware costs devoted to CALEA compliance. Nortel believes that the "dialed digit extraction" "punch list" feature which the FCC proposes to add to J-STD-025 will necessitate the purchase of a "digit collection receiver" for each USCC switch at a cost of approximately \$1,000 per switch. Additional hardware will be required for "packet data" interception, the costs of which Nortel cannot now quantify.

And there is little doubt that additional hardware and software costs, both foreseeable and unforeseeable, will be incurred as the CALEA implementation process moves forward. There will also be considerable internal labor and managerial time costs involved in this process.

Conclusion

USCC understands that it is difficult, if not impossible, for the FCC to balance the costs to carriers in implementing CALEA against the benefits of more effective law enforcement. What USCC does ask, on its own behalf and on behalf of its fellow CMRS carriers, is that the FCC bear those costs in mind in interpreting

CALEA's requirements and, above all, in providing a reasonable amount of time for its implementation.

Respectfully submitted,

UNITED STATES CELLULAR CORPORATION

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